# BRUHAT BANGALORE MAHANAGARA PALIKE

## YELAHANKA ZONE

***Name of the work:*** **Estimate for Improvements to Roads and Providing Covering Slabs to Existing Drains in Ward No. 11 (Kuvempungara), Vidyaranyapura Sub Division.**

| | | | Estimate Cost: | | | | | | 5000000.00 |
|---|---|---|---|---|---|---|---|---|---|
| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
| 1 | KSRRB 300-2. Earth work excavation by manual means in **hard soil** involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. **Page No. 152 / Item No. 19.2 / PWD SR 2013-14** | Cum | | | | | | | |
| | Drain | | 2 | 50.00 | 1.00 | 1.20 | 120.00 | | |
| | | | 2 | 50.00 | 1.00 | 1.20 | 120.00 | | |
| | Culvert | | 1 | 5.00 | 2.00 | 1.05 | 10.50 | | |
| | CC Road @ Singapura Novodiaya School Road | | 1 | 50.00 | 5.50 | 0.15 | 41.25 | | |
| | Velangini Lane | | 1 | 100.00 | 4.00 | 0.25 | 100.00 | | |
| | | | 1 | 100.00 | 5.00 | 0.15 | 75.00 | | |
| | Velangini Line Desilting of CC Drain | | 2 | 250.00 | 0.90 | 0.35 | 157.50 | | |
| | | | | | | | **624.25** | 90.72 | **56632.00** |
| | Basic Rate | 84.00 | | | | | | | |
| | Area Weightage @8% | 6.72 | | | | | | | |
| | **Total** | **90.72** | | | | | | | |
| 2 | KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs** using **40mm** and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, **in foundation and plinth**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 **Page No. 12 / Item No. 4.3 PWD SR - 2013-14** | Cum | | | | | | | |
| | CC Drain | | 2 | 50.00 | 1.00 | 0.15 | 15.00 | | |
| | | | 2 | 50.00 | 1.00 | 0.15 | 15.00 | | |
| | Culvert | | 1 | 5.00 | 2.00 | 0.15 | 1.50 | | |
| | CC Road | | 1 | 50.00 | 5.50 | 0.15 | 41.25 | | |
| | | | 1 | 100.00 | 4.00 | 0.15 | 60.00 | | |
| | | | 1 | 100.00 | 5.00 | 0.15 | 75.00 | | |
| | | | | | | | **207.75** | 4290.84 | **891422.00** |
| | Basic Rate | 3973.00 | | | | | | | |
| | Area Weightage @ 8% | 317.84 | | | | | | | |
| | **Total** | **4290.84** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 3 | KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in **superstructure with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 **Page No. 26 / Item No. 5.12/ PWD SR 2013-14** | Cum | | | | | | | |
| | Culvert | | 2 | 5.00 | 0.60 | 0.90 | **5.40** | 4341.76 | **23446.00** |
| | Basic Rate | 4096.00 | | | | | | | |
| | Area Weightage @ 6% | 245.76 | | | | | | | |
| | Total | **4341.76** | | | | | | | |
| 4 | KSRB 15.1.3: Providing **ruled pointing to coursed stone masonry** with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. **Page No. 122 / Item No. 15.3 / PWD SR 2013-14** | Sqm | | | | | | | |
| | Culvert | | 2 | 5.00 | | 0.90 | **9.00** | 76.32 | **687.00** |
| | Basic Rate | 72.00 | | | | | | | |
| | Area Weightage @ 6% | 4.32 | | | | | | | |
| | **Total** | **76.32** | | | | | | | |
| 5 | KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix M15 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12 / Item No. 4.6 / PWD SR 2013-14** | Cum | | | | | | | |
| | Culvert Coping | | 2 | 5.00 | 0.60 | 0.10 | 0.60 | | |
| | | | | | | | **0.60** | 4690.50 | **2814.00** |
| | Basic Rate | 4425.00 | | | | | | | |
| | Area Weightage @ 6% | 265.50 | | | | | | | |
| | **Total** | **4690.50** | | | | | | | |
| | | | | | | | | | |
| 6 | KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface** such as **walls at any thickness**, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 **Page No.17 / Item No. 4.31 PWD SR - 2013-14** | Sqm | | | | | | | |
| | For Drains Side Walls | | 8 | 50.00 | | 0.90 | 360.00 | | |
| | | | 8 | 50.00 | | 0.90 | 360.00 | | |
| | Covering Slab Bottom | | 2 | 50.00 | 0.60 | | 60.00 | | |
| | | | 2 | 50.00 | 0.60 | | 60.00 | | |
| | Covering Slab Sides | | 4 | 50.00 | | 0.15 | 30.00 | | |
| | | | 4 | 50.00 | | 0.15 | 30.00 | | |
| | Culvert Covering Slab Bottom | | 1 | 5.00 | 0.60 | | 3.00 | | |
| | Covering Slab Sides | | 2 | 5.00 | | 0.25 | 2.50 | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | | 2 | 1.80 | | 0.25 | 0.90 | | |
| | Doddachannappa Layout | | 2 | 120.00 | 0.45 | | 108.00 | | |
| | | | 4 | 120.00 | | 0.10 | 48.00 | | |
| | | | | | | | **1062.40** | 271.08 | **287995.00** |
| | Basic Rate | 251.00 | | | | | | | |
| | Area Weightage @ 8% | 20.08 | | | | | | | |
| | **Total** | **271.08** | | | | | | | |
| 7 | KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459 cum wuth superplastisier @ 3lts confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works **in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, wall** (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.6 **Page No. 13 / Item No. 4.11 PWD SR - 2013-14** | Cum | | | | | | | |
| | Bottom | | 2 | 50.00 | 0.90 | 0.15 | 13.50 | | |
| | | | 2 | 50.00 | 0.90 | 0.15 | 13.50 | | |
| | Side Walls | | 4 | 50.00 | 0.15 | 0.90 | 27.00 | | |
| | | | 2 | 50.00 | 0.15 | 0.90 | 13.50 | | |
| | Covering | | 2 | 50.00 | 0.90 | 0.10 | 9.00 | | |
| | | | 2 | 50.00 | 0.90 | 0.10 | 9.00 | | |
| | Culvert | | 1 | 5.00 | 1.80 | 0.23 | 2.07 | | |
| | Bottom Concrete for Existing CC Drain | | 2 | 250.00 | 0.90 | 0.15 | 67.50 | | |
| | Repairs of Side Walls | | 4 | 50.00 | 0.15 | 0.60 | 18.00 | | |
| | Missing Covering Slab | | 2 | 100.00 | 0.90 | 0.10 | 18.00 | | |
| | Existing Drain Covering Slab | | 2 | 120.00 | 0.45 | 0.10 | 10.80 | | |
| | | | | | | | **201.87** | 5639.76 | **1138498.00** |
| | Basic Rate | 5222.00 | | | | | | | |
| | Area Weightage @ 8% | 417.76 | | | | | | | |
| | **Total** | **5639.76** | | | | | | | |
| 8 | KSRB 4.9.2: Providing **TMT steel reinforcement for R.C.C** work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **Page No. 19 / Item No. 4.46.2 PWD SR 2013-14** | Qntl | | | | | | | |
| | Consider 75 Kg/Cum | | 0.75 | 201.87 | | | **151.40** | 7450.92 | **1128088.00** |
| | Basic Rate | 6899.00 | | | | | | | |
| | Area Weightage 8% | 551.92 | | | | | | | |
| | Total | **7450.92** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 9 | KSRRB M2600-3: Providing & fixing 20 mm thick **compressible fibre board** in expansion joint complete as per drawing & technical specification complete as per specifications, MORTH specification No. 2605, **No. 251 / Item No. 31.3 PWD SR 2013-14** | M | | | | | | | |
| | CC Road | | 6 | 5.00 | | | 30.00 | | |
| | | | 12 | 4.00 | | | 48.00 | | |
| | | | 12 | 5.00 | | | 60.00 | | |
| | | | | | | | **138.00** | 137.16 | **18928.00** |
| | Basic Rate | 127.00 | | | | | | | |
| | Area Weightage @ 8% | 10.16 | | | | | | | |
| | **Total** | **137.16** | | | | | | | |
| | | | | | | | | | |
| 10 | Providing and laying cement concrete using 20mm and down size granite jelly of **ready mixed concrete (RMC)for R.C.C works** laid in 15cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar, form works and scaffoldings to withstand pumping of concrete, with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) Ready mixed Cement concrete M-20 (1:1.5:3) for raft foundation, column footing, main and secondary beams. **Page No. 19 / Item No. 4.48.1/ PWD SR 2013-14** | Cum | | | | | | | |
| | CC Road @ Singapura Novodiaya School Road | | 1 | 50.00 | 5.50 | 0.10 | 27.50 | | |
| | | | 1 | 100.00 | 4.00 | 0.10 | 40.00 | | |
| | | | 1 | 100.00 | 5.00 | 0.10 | 50.00 | | |
| | | | | | | | **117.50** | 6464.88 | **759623.00** |
| | Basic Rate | 5986.00 | | | | | | | |
| | Area Weightage @ 8% | 478.88 | | | | | | | |
| | **Total** | **6464.88** | | | | | | | |
| | | | | | | | | | |
| 11 | **Vaccum De-watering** with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator HOM of machinery Screed Vibratiry, Power Floater, blade and disc etc., with all lead and lift No. **190 / Item No. 22.7/ PWD SR 2013-14** | Sqm | | | | | | | |
| | CC Road @ Singapura Novodiaya School Road | | 1 | 50.00 | 5.50 | | 275.00 | | |
| | | | 1 | 100.00 | 4.00 | | 400.00 | | |
| | | | 1 | 100.00 | 5.00 | | 500.00 | | |
| | | | | | | | **1175.00** | 91.80 | **107865.00** |
| | Basic Rate | 85.00 | | | | | | | |
| | Area Weightage @ 8% | 6.80 | | | | | | | |
| | Total | **91.80** | | | | | | | |
| | | | | | | | | | |
| 12 | Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km ( Page No.123) | Cum | | | | | | | |
| | | | Vide Item No. 1 | | | | **624.25** | 72.71 | **45386.00** |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | Basic rate for haulage of materials as per item no.17.4 page 141) Rs. 2.00 | | | | | | | | |
| | Average weight of earth 1.28 tonne / kg for 2X1.28X2.00=5.12 | 5.12 | | | | | | | |
| | Add loading and unloading Vide item no.17.1 P.no.141 | 62.20 | | | | | | | |
| | | **67.32** | | | | | | | |
| | Area Weightage @ 8% | 5.39 | | | | | | | |
| | **Total** | **72.71** | | | | | | | |
| | | | | | | | | | |
| 13 | **Sub Total** | | | | | | | | **4461384.00** |
| | | | | | | | | | |
| 14 | KRIDL Serive Charges and App Taxes @ 11% | | | | | | | | **490752.00** |
| | | | | | | | | | |
| 15 | For Third Party QC Charges @ 1% | | | | | | | | **44614.00** |
| | | | | | | | | | |
| 16 | Miscellaneous and other Charges | L/S | | | | | | | **3250.00** |
| | | | | | | | | | |
| | | | | | | | | **Total** | **5000000.00** |
| | **(Rs.Fifty Lakhs Only)** | | | | | | | | |

**CERTIFICATE:**

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2013-14.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

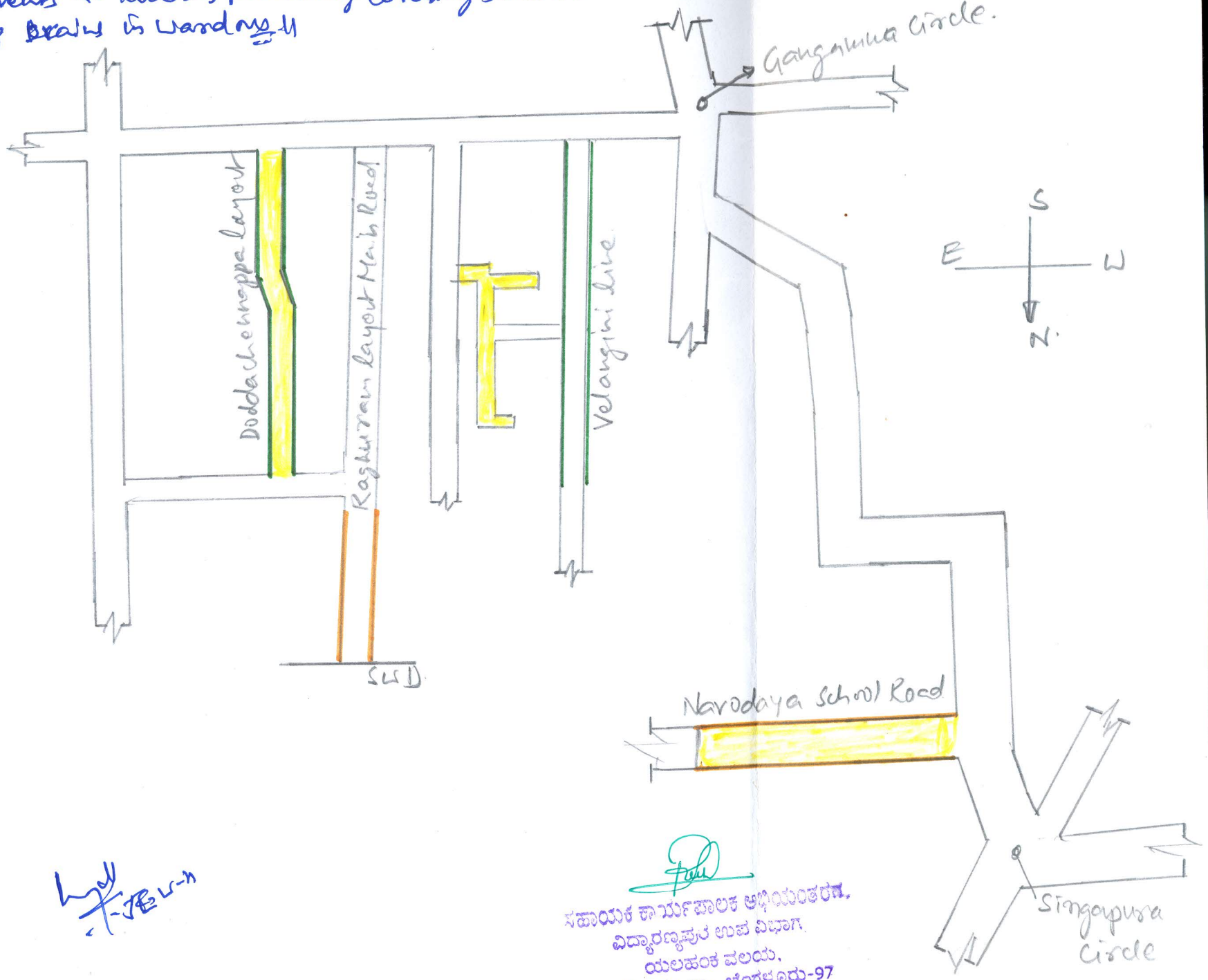
Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

Technical Sanction for Rs. 50.00 Lakhs
Fifty Lakhs only
P0190
SE/YEL/378/14-15,
Dt. 03-03-14
SE (BTP.Div.)
AE/JE

ADMINISTRATIVELY SANCTIONED FOR Rs. 50.00 lakhs
Rupees Fifty Lakhs only
Under P-0190
Registered as EE ( ) No. 9
Subj
enclosed to the EE ( ) No.
Dt. Est.
Addl Com(Y2) AS/937/2013-14
dated 26/2/2014 Rs. 50.00 lakhs

Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Name of work :- Improvements to Roads & providing Covering Slab to Existing Drains in Wards 44




→ CC drain

→ CC Road

→ Existing Drain over Covering Slab

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ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ.
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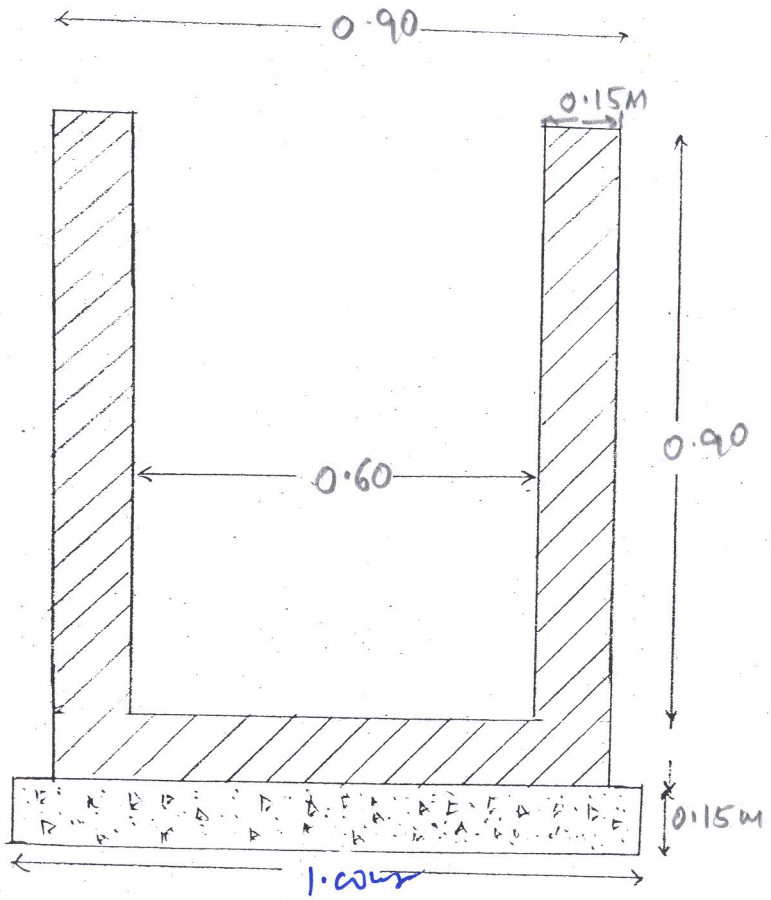


# CROSS SECTION OF CC DRAIN

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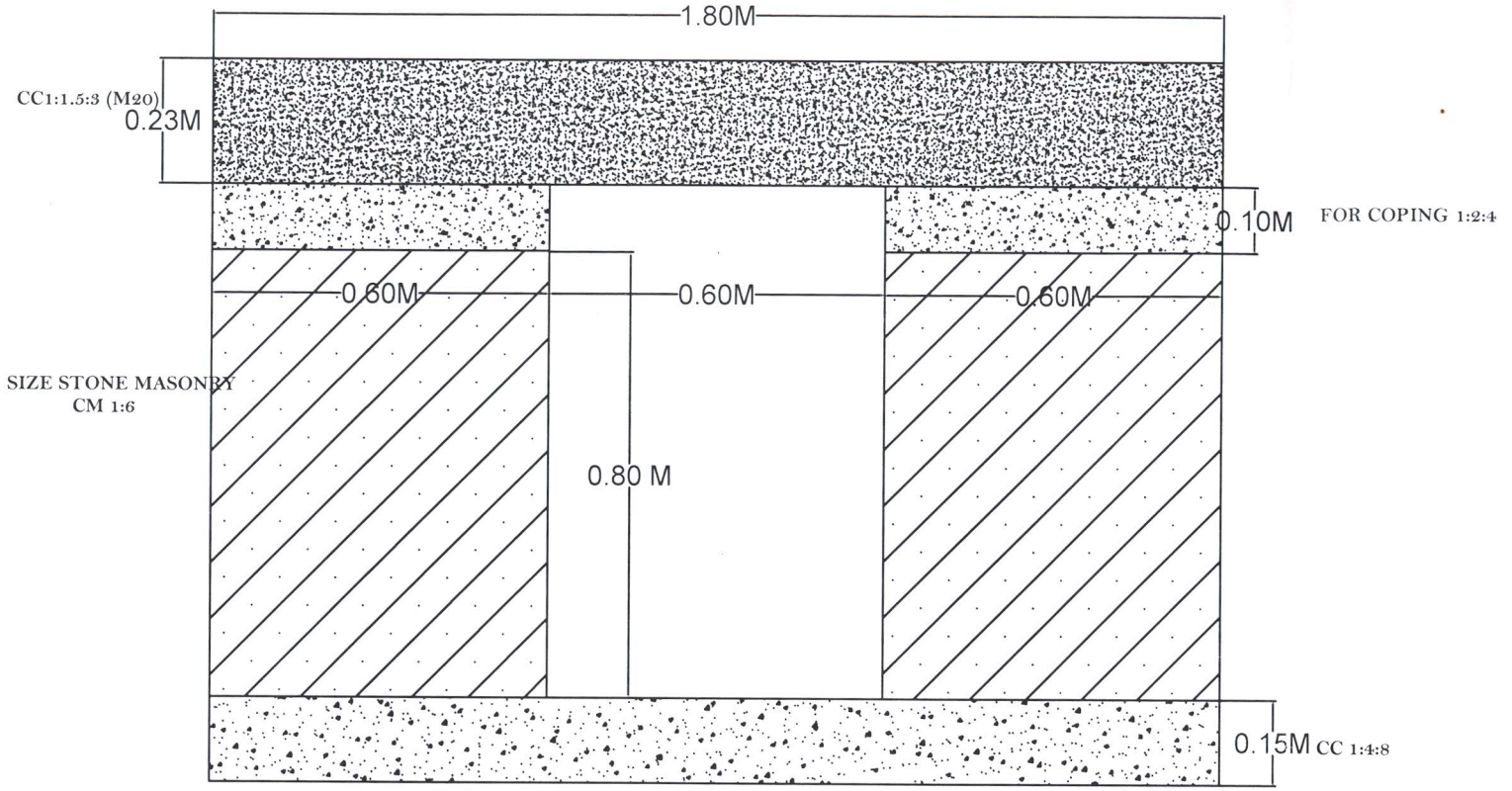
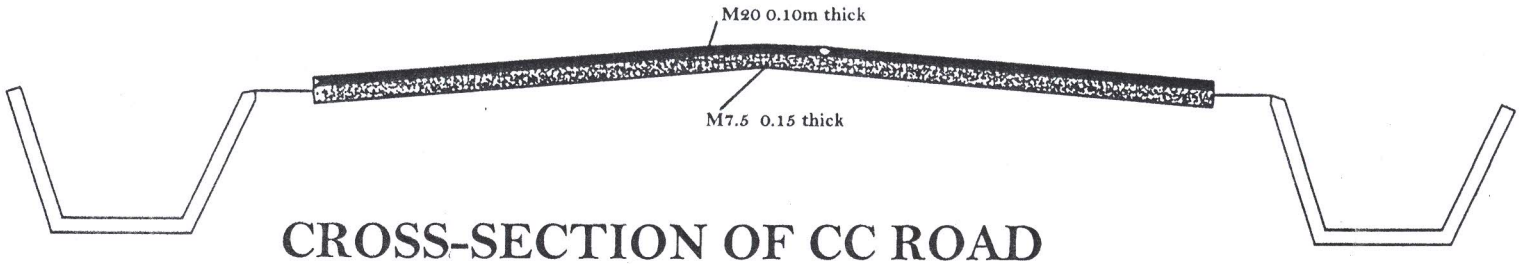



CROSS-SECTION OF CULVERT

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER
VIDYARANYAPURA SUB DIVISION.

## NAME OF WORK:-




# CROSS-SECTION OF CC ROAD

**INDEX**

M7.5 1:4:8 0.15m Thick

M20 1:1.5:3 0.10m Thick

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER
VIDYARANYAPURA SUB DIVISION.